

REMARKS

Prior to entry of the present amendment, claims 26-38 are pending. Claims 26-38 are rejected under 35 U.S.C. § 112, first paragraph. Applicants address each basis of the rejection as follows.

Claim amendments

Claims 31-38 have been canceled. No new matter has been added by the present amendment.

Applicants reserve the right to pursue any canceled subject matter in this or in a continuing application.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 26-38 are rejected under 35 U.S.C. § 112, first paragraph, for an asserted lack of written description and enablement in the specification as filed. Claims 31-38 have been canceled and rejection of these claims, therefore, is moot. Applicants respectfully traverse the § 112, first paragraph rejection as it applies to claims 26-30.

Written Description

The Office states (page 3):

The scope of akt variants as claimed herein encompasses any akt-like nucleic acid sequence found in mammalian or human [sic] which merely hybridize to SEQ ID NO: 87, 89, 91, 93, 95, 97.

In response, Applicants note that claim 26 and its dependent claims do not recite hybridization language, but rather require the nucleic acid sequence to encode a polypeptide including a sequence that has at least 95% identity to the sequence of SEQ ID NO: 87, 89, 91, 93, 95, or 97 and that functions in insulin signaling.

Applicants submit that their specification provides a written description of the invention of claim 26 in sufficient detail to satisfy the standard set forth by the Patent Office in its Written Description Guidelines and by the Federal Circuit in *Lilly*. In particular, *Lilly* specifically states that the written description of a genus of DNA may be achieved by a “recitation of structural features common to members of the genus.”

Regents of University of California v. Eli Lilly & Co., 119 F.3d 1159, 43 U.S.P.Q.2d 1398 (Fed. Cir. 1997). The Guidelines for Examination of Patent Applications Under 35 U.S.C. 112 ¶1, “Written Description” Requirement, 66 Fed. Reg. 1099 (Jan. 5, 2001)

similarly state:

The written description requirement for a claimed genus may be satisfied ... by disclosure of relevant, identifying characteristics, *i.e.*, structure or other physical and/or chemical properties, by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the applicant was in possession of the claimed genus.

As noted above, claim 26 requires the nucleic acid sequence to encode a polypeptide including a sequence that has at least 95% identity to the sequence of SEQ ID NO: 87, 89, 91, 93, 95, or 97 and that functions in insulin signaling. The requirement for 95% sequence identity clearly sets forth sufficient structural identifying

characteristics, in combination with the functional requirement of insulin signaling, for the skilled artisan to recognize that Applicants were in possession of the claimed invention at the time the application was filed. This basis of the 35 U.S.C. § 112, first paragraph rejection should be withdrawn.

Enablement

The Office also states (page 5):

Since the specification fails to disclose a representative number of species by structure and function encompassed by the genus as claimed i.e. any and all variants of human or mammalian nucleotide sequence that encodes any akt-like protein, it is unclear how one skilled in the art [could] use the invention as claimed.

Applicants respectfully submit that claim 26 and its dependent claims are free of this basis for rejection.

Claim 26 requires the nucleic acid sequence to encode a polypeptide including a sequence that has at least 95% identity to the sequence of SEQ ID NO: 87, 89, 91, 93, 95, or 97 and that functions in insulin signaling. As such, the claims are not directed to “any and all variants” of nucleic acid sequences encoding an Akt-like protein. Instead, the claims require a high degree of structural similarity between the nucleic acid sequences encompassed by the claims. In view of this degree of structural similarity and the standard knowledge in the art, Applicants submit that the skilled artisan can make and use the claimed invention without undue experimentation. The enablement rejection should also be withdrawn.

CONCLUSION

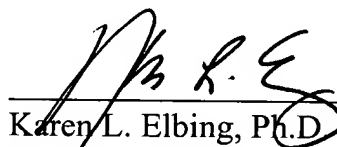
Applicants submit that the application is now in condition for allowance, and this action is hereby respectfully requested.

Enclosed is a Petition to extend the period for replying to the Office Action for three (3) months, to and including November 15, 2007, and a check in payment of the required extension fee.

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 15 November 2007



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